

EW-403

Shipped in packet-tape reel(5000pcs/Reel)

EW-403 is composed of a Ultra-high sensitive InSb Hall element and a signal processing IC chip in a package.

Bipolar Hall Effect Latch

Supply Voltage 2.5~5.5V

Hall Element Continuous Excitation

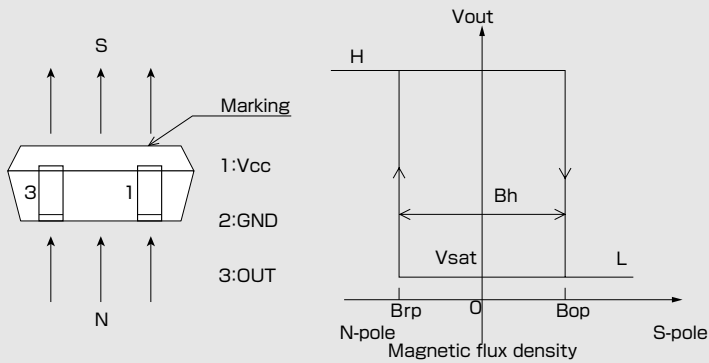
Low Sensitivity Bop:10mT

Output Open Collector

SMT

Notice:It is requested to read and accept "IMPORTANT NOTICE" written on the back of the front cover of this catalogue.

●Operational Characteristics

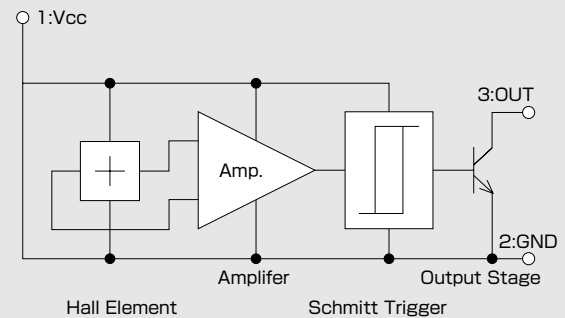


●Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Limit	Unit
Supply Voltage	V_{CC}	5.5(*)	V
Output H Voltage	$V_{O(off)}$	V_{CC}	V
Output L Current	I_{sink}	15	mA
Operating Temperature Range	T_{opr}	-30 ~ 115	°C
Storage Temperature Range	T_{stg}	-40 ~ 125	°C

(*) Please refer to Supply Voltage Derating Curve.

●Functional Block Diagram



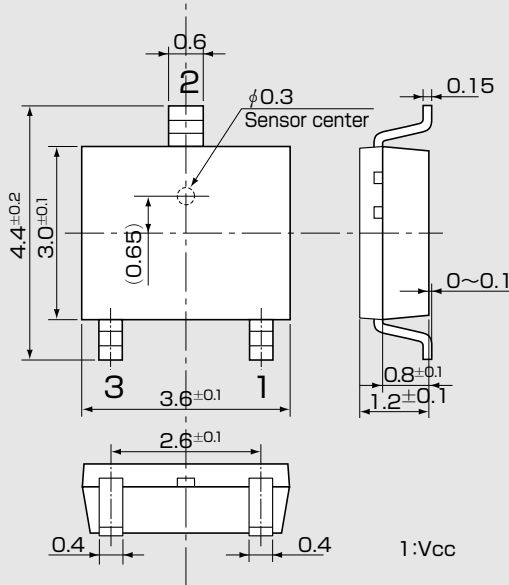
●Magnetic and Electrical Characteristics (Ta=25°C)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Supply Voltage	V_{CC}		2.5	3	5.5	V
Operating Point	B_{OP}	$V_{CC}=3V$	5		20	mT
Release Point	B_{rp}	$V_{CC}=3V$	-20		-5	mT
Hysteresis	B_h	$V_{CC}=3V$	10			mT
Output Saturation Voltage	V_{sat}	$V_{CC}=3V, OUT="L", I_{sink}=10mA$			0.4	V
Output Leakage Current	I_{leak}	$V_{CC}=3V, OUT="H", V_{out}=3V$			1	μA
Supply Current	I_{CC}	$V_{CC}=3V, OUT="H"$			8	mA

1 [mT] = 10 [Gauss]

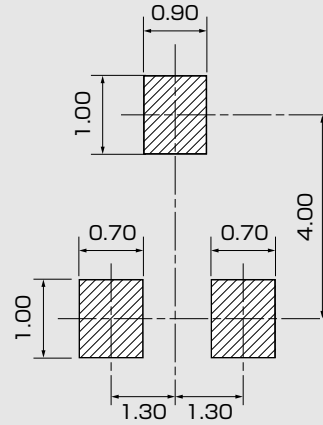
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●Package (Unit:mm)

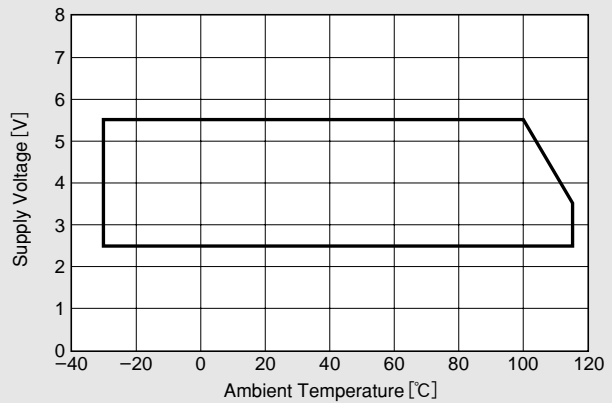


- Note1) The sensor center is located within the $\phi 0.3\text{mm}$ circle.
- Note2) The metal portions on the package side (support lead) are connected to the internal circuits. The support lead should be isolate from the external circuit and the other support lead.

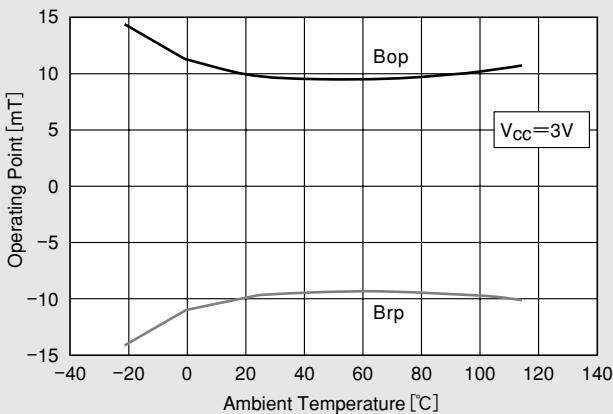
●(For reference only)Land Pattern (Unit:mm)



●Supply Voltage



●Temperature Dependence of Bop, Brp



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April 4, 2012